Lesson: The Water Cycle

Introduction to the Lesson/Activity	This lesson is to teach students about the water cycle.	Grade k – 12
Objectives	Students will: 1. be able to understand that water travels in a cycle. 2. understand the parts of the water cycle: evaporation, condensation, and precipitation.	
Materials	Paper Pencil	Water cycle worksheet (optional)

Activity

1. What is a cycle? *Something that goes in a circle. A bicycle has two circular tires. Something that travels in a circle is a cycle.*
2. Show students a glass of water, and discuss where water comes from.
3. Define the key vocabulary terms at board and provide examples of when students may have witnessed evaporation or condensation. Examples of evaporation include: Steam rising from a pot of water, Puddles that have dried up, and water sitting in a bowl that seems to 'disappear' after a few days. Examples of condensation include: Water droplets forming on the outside of your water glass, A foggy mirror in a bathroom, Foggy windows in a car
4. Demonstrate the cyclical movement of water either by drawing the water cycle at the board, or sharing a poster of the water cycle.
5. Explain that in the experiment to follow, we will be creating a mini water cycle.
6. Place a tablespoon of salt in bottom of plastic bowl. Fill with about 1 inch of warm water. Taste water with finger to see if you can taste the salt.
7. Place the empty small jar in center of water. Cover plastic bowl with plastic wrap. Set marble on center of plastic wrap above the jar. Place in a sunny spot for a few hours, or one day. Later, check inside the jar. There will be fresh water. Taste it to see if it tastes salty. The warm water from the bowl evaporated, created condensation when it hit the cool plastic wrap, traveled down the plastic wrap to the center due to the weight of the marble, and dripped into the jar as precipitation.
8. Ask students to share their knowledge of the experiment by relating it to the parts of the water cycle. Tell where there was evaporation, condensation, and precipitation in the experiment.
9. Ask students to draw and label the parts of the water cycle. (worksheet is attached below if you desire to use ours.)
10. Close with a discussion of how water is essential to all living organisms. Plants and animals must have water to survive. Nearly everything is interconnected to the water cycle. Rocks channel water into streams, streams and rivers carry water across the land. Ponds, lake, marshes, and swamps hold water in place. Trees draw water from the soil and transport it up in to the leaves and then out into the air. Clouds are airborne carriers of water across the sky.

Key Vocabulary

Spring, Groundwater, Freshwater spring, Mineral spring, Precipitation, Aquifer, Water cycle, Evaporation, Condensation, Precipitation, Water Table

Essential Questions

1. What is a water cycle?
2. Where does a spring come from?
3. What is an aquifer?
4. What is precipitation, evaporation, condensation and ground water?

Oklahoma Pass Standards	**Grade 1- 3** Science Process Standard 2 & Process Standard 4 **Grade 4-8** Science Process Standard 1 & Process Standard 3 **Kindergarten** Oral Language/Listening and Speaking: Standard 1, Standard 2, & Standard 3 **Grade 1 –Earth Science** - Standard 3 **Grade 2- Earth Science** - Standard 23	**Grade 3 - Earth Science** - Standard 3 **Grade 4 – Physical Science** - Standard 4 **Grade 5 – Physical Science -** Standard 1 **Grade 6 – Physical Science -** Standard 2 **Grade 7 – Earth/ Space Science -** Standard 5 **Grade 8 –Earth/ Space Science -** Standard 4 **High School – Environmental Science -** Standard 1, Standard 4, & Standard 5 Science Process Standard 1
`Worksheet	Water cycle	
Other Suggested Activities	Rock formations Geologic timeline	Water Conservation Water Pollution